

SOME PSYCHOSOMATIC AND THERAPEUTIC ASPECTS OF WAR NEUROSES*

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IT is obvious, as we study a varied case material and the literature reports, that we can divide the war neuroses into acute cases and chronic ones. The acute cases show a different symptomatology than those which run a prolonged course. The acute cases of war neuroses can again be roughly divided into two groups: Those cases in which a neurosis develops suddenly, and those in which it develops rather slowly. There are naturally no clearly-defined boundary lines. Nevertheless, in the majority of the cases the above-mentioned classification can be employed. The acute cases of war neuroses show different clinical pictures. We encounter four main groups: First, the fatigue and exhaustion states; second, the anxiety types; third, the obsessive compulsives; and fourth, the cases which display primarily a psychosomatic syndrome as, for instance, gastric ulcer, asthma, etc. Regardless of the clinical symptomatology we see a common reaction in all of them. The slowly developing cases only show in a more protracted way the manifestations which the acute shock cases display suddenly.

In a previous publication I described that emotional tension has a tremendous impact on the self-government of the individual. It collapses totally or partially, and is replaced by a state of anarchy, which disorganizes the normal balance of excitation and inhibition in the organism. The disintegration of self-government manifests itself in three different ways: in an emotional storm, in a motility storm, and in a vegetative storm. In other words, the patient shows signs of anxiety, terror, amnesia, confusion, hyper- or hypomotility, immobilization or trembling, and, what is very important, the vegetative nervous system is practically always involved, showing an alteration in the sleep function, increased perspiration, changes in the regulative mechanisms of the heart, bowels, etc.

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We emphasized that this phase of the war neuroses subsides in a majority of the cases, if the patient receives proper rest, food and sedation, and if he is removed from the danger zone. These states, which are very similar to the old fatigue or exhaustion states, encountered following a marked emotional upset or after a debilitating physical disease, recover very quickly. This first anxiety phase of the traumatic neuroses is a psychosomatic entity. It is most likely that in such a state a dissociation occurs between the cortical activity and the subcortical emotional and vegetative regulative functions. We have a state of diaschisis. This would explain many of the symptoms of the acute war neuroses, the hyper- or hypo-excitability, the lack of emotional control, the inability to select stimuli, but to respond totally to every little stimulus, which is in no relationship to the total response directed toward it. It also explains a dissociation of the vegetative control and the heightened tendency of the individual to convert emotional manifestations into a vegetative function.

We also emphasized that the traumatic war neuroses not only profoundly disturb the mental integration of the individual, but also his physiological function, and we have to look upon emotion which provokes a disturbance not only as a psychic mechanism, but also as a somatic one. In this sense the older idea that the shock does something to the organism which is more than mental is essentially correct. If we assume that fear is the basic mechanism in all traumatic war neuroses, we have to realize that fear is one of the most potent physiological disorganizers known, which furthermore tend to get conditioned.

After the first phase of the traumatic war neuroses many of the patients who do not recover enter into the second phase of the anxiety state, in which the constitutional disposition of the person plays quite a role. In the second phase, the acute anxiety and somatic manifestations are fused with old infantile fear and anxiety structures. The treatment, in our opinion, has to interpose itself between these two layers, and to prevent an amalgamation of these two phases of anxiety. We see that in individuals in whom infantile fear is not very marked, and in whom the neurosis is strongly externalized, the treatment succeeds rather quickly, whereas in others, deep-rooted fear mechanisms become activated, and in many instances the treatment becomes difficult.

In the treatment of the traumatic war neuroses many different methods were used. The treatment could be subdivided into supportive,

suggestive, hypnotic and into analytical forms. In addition, in the last war and in this war, group treatments were used. It is obvious that in the hands of skilled persons, each of these treatments yields results. We personally preferred, in the acute cases, the treatment which could be called narcosuggestive or narcocathartic.

We believe that sedation plays a great role in preventing the development of more serious states of war neuroses, if it is properly applied in the acute state.

We especially preferred to conduct the psychotherapeutic procedure in connection with the sedation because it facilitated the psychotherapy. It was much easier to suggest to a relaxed and sedated individual that many of his fears and vegetative dysfunctions would disappear. We applied this narcosuggestive treatment in the following manner. The patient had an initial interview, during which all the material was gathered concerning the war experience. His previous attitudes, his general emotional organization, his physical and mental make-up, were sized up. He was then reassured that his symptoms, as, for instance, insomnia, jitteriness, anorexia, would be quickly relieved. Incidentally, this reassurance was reinforced quite strongly by other successfully treated patients.

After the initial interview, a sodium amytal interview was conducted. In this instance we injected 3 to 5 cc. sodium amytal intravenously. The injection should be given slowly. The amount depends on the patient's reaction. The optimum dose of sodium amytal produces a state of relaxation, the patient is somewhat drowsy, he says he feels as relaxed as though he were about to sleep. In some patients actual "twilight sleep" can be produced. The drug should not be given in sleep-producing amounts. When the patient is relaxed and at ease, we ask him about his traumatic experiences, and after a while we let him talk freely. This interview is partly a spontaneous and partly a directed one. If the material uncovered during this interview indicates that the conscious traumatic experience of the patient is about the same as was obtained in the initial interview, he is marked for suggestive treatment. In the same way, if the patient expresses a wish to forget his experiences, and does not ruminate on his traumatic memory material, he is again a candidate for a suggestive treatment. If, however, the patient in the sodium amytal interview produces a large amount of material which was not reported at the initial interview, or

if the patient is preoccupied to regain repressed material, he will do best if a narcocathartic treatment is given. If narcosuggestion is used, it is pointed out to the patient that he is now relaxed, quiet, that the action of his heart is normal, that he doesn't perspire, and that the doctor is capable of stopping his overirritation. He also receives short and pointed explanations about the genesis of his symptoms, and he is reassured about his anxiety conflicts. Such a treatment can be carried out in a few minutes in connection with the injections of sodium amytal. At the end of this treatment it is suggested that the patient should sleep. Such a treatment is carried out about three to four times a week. If necessary, it can be given more often.

In the narcocathartic form of treatment, after injection of the sodium amytal, the patient is asked to tell his experiences. He generally will start off with some conscious war experience, and then he will continue to talk about other repressed material. Free association is used, but not entirely freely. If the patient should bring in material which is felt to have no connection with his sickness, he is pressed back to the war experience. With this type of treatment in the acute cases of war neuroses, it is not very essential to follow the indicated clue back into childhood experiences. In the more chronic cases of war neuroses, where a more analytical procedure is followed, this will be necessary.

The narcocathartic treatment session lasts at least half an hour. At the end of it, the same suggestions should again be given as in the narcosuggestive treatment. This form of treatment should be given about three times a week. The gathered material should be explained to the patient. This can be given in a non-sedated state.

The narcocathartic type of treatment brings us to a theoretical consideration. In most of the text-books on war neuroses, it is mentioned that the conflict between duty and self-preservation is productive of anxiety. It is also mentioned that if the patient produces the repressed material in connection with the traumatic experience, his symptoms will cease. We have no objection to the first explanation, even though we feel that self-preservation alone could produce anxiety states without a conflict concerning duty. In acute anxiety states of civilians who were in a panic, the sense of duty didn't even enter into the picture.

The second contention, that the treatment has to concentrate on releasing repressed material, is a too generalized assumption. A large number of our patients were fully conscious of what they went through.

That a considerable layer of the experiences are conscious is probably the reason why many cases of war neuroses respond quickly to therapy, in contrast with the ordinary peacetime neuroses.

In another group of patients, however, the production of the repressed material, the emotional abreaction, undeniably facilitated the cure. In many instances, patients who wanted to forget the traumatic experience, who didn't even want to dwell on it, who merely wanted a relief from the overaction of the nervous system, fared best, while patients in whom repressed material had to be brought back did not do so well. I presume that most of the chronic cases belong to this second group, while the first group, which were simple anxiety or fatigue states, are largely overcome by themselves. Patients who ruminate in a retrograde way about traumatic experiences belong to the group which wanted to forget. Patients who worry a great deal as to what would happen to them if they go back belong mainly in the group which wanted to know everything, to what dangers they were exposed, what they went through; these broodings often reinforced some of their traumatic fears.

We believe that the quieting of the vegetative nervous system, the possibility of diminishing the emotional push which is behind the anxiety state, is largely responsible for the effectiveness of the amytal treatment.

Another important factor in this treatment is the fact that the patient actually experiences on his own body the promises of the cure rather quickly before a conditioning sets in, and before he despairs of being able to overcome his anxieties. The treatment can be given rapidly, and a fairly large number of patients can be treated simultaneously. With hypnosis very similar results can be obtained, but the more intractable type of patients do not respond to it.

Another advantage of this treatment is that it can be used even in those cases in which confusion, amnesia and hysterical paralysis coexist. These patients generally do not benefit by supportive treatment alone, or by group treatment. They expect that something physical will be done to them. They do not consider the physician who simply talks to them as a therapist.

The psychosomatic treatment of the traumatic war neuroses is probably the most effective one in our experience, and I think it should be used widely and almost immediately after the patient is admitted to a hospital. That means that the cases should be treated close to the place

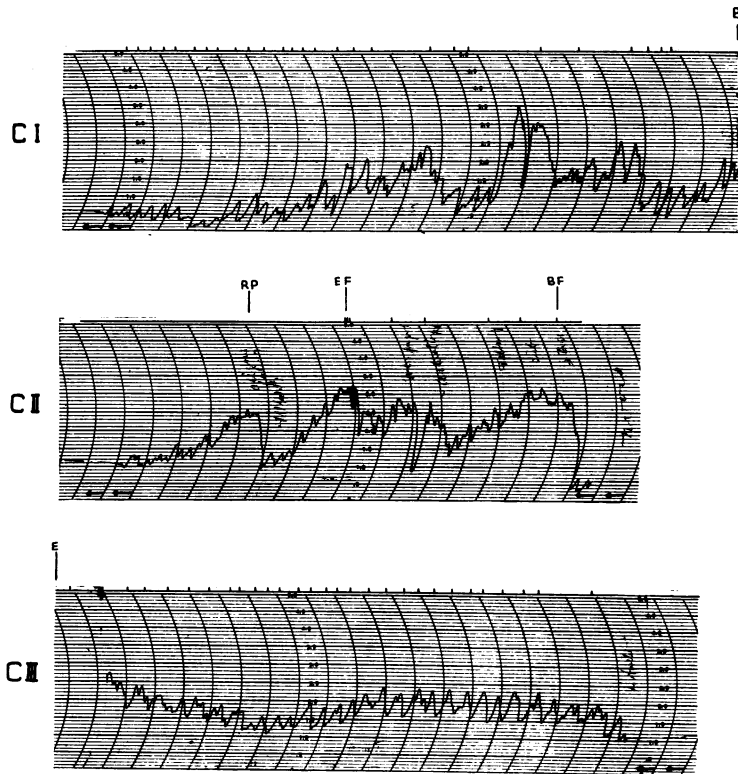


Figure 1

- I. Before sound film: Simple questions asked
 - II. During sound film: Sound film of torpedoing shown
 - III. After sound film: Simple questions repeated
 - B. Beginning of record
 - BF. Beginning of sound film
 - E. End of record
 - EF. End of sound film
 - RP. Recovery point after the showing of sound film
- The RP. is the point at which the individual returns to the approximate level of electrical resistance with which he began at BF.
- This record indicates a quick "emotional" recovery of the patient after seeing the sound film. The distance between EF. and RP. took about 50 seconds.

where the war neurosis developed, and that the treatment should not be postponed a few weeks or months until the patient is brought back home, because during the elapsed time the best therapeutic opportunities are missed and the anxiety mechanisms become conditioned.

We believe that with these comparatively simple methods of treatment, if applied quickly and skillfully, about 75 per cent of the patients

could be restored to normal mental health.

In practically all cases of war neuroses emotional tension can be detected. This tension is a forerunner or a concomitant of anxiety. It is obvious that this tension is expressed differently by various individuals. The premorbid, emotional organization of the patient, pathoplastically influences the overt expression of nervous tension. The feeling of tension is the first symptom which occurs in all types of war neuroses, and it is practically the last symptom which disappears. The "jittery" feeling is present in the slowly developing fatigue state as well as in the acute "terror" or "shock" cases. In the latter it is often covered by the more dramatic and conspicuous symptoms of agitation, amnesia, or hysterical manifestations. When these symptoms disappear the patients still complain about being tense, jumpy, highstrung.

We do not want to discuss at present the relationship between tension and anxiety. In our opinion they are intimately related. The tension is the expression of a sustained overalertness of the nervous system, most likely originally devised to deal with self-preservation. Due to the intimate relationship between emotional tension and vegetative nervous system function, repeated attempts were made to register emotion indirectly at its somatic end. The registration of the heart beat, blood pressure, pulse rate and respiration were all tried in connection with different emotional states. It is also known for a long time that the electrical resistance of a person changes under emotional stress, and that it is possible to register the fluctuation of this resistance. The so-called "lie-detector" techniques are based on this principle.

Utilizing this basic idea, we developed a technique to demonstrate the emotional tension in patients suffering from war neuroses. We found the psychogalvanic registration simpler and more reliable than the registration of the blood pressure, which in many cases shows an increase of the systolic readings, but it fluctuates quite markedly in the same patient, and for that reason is quite unreliable.

The galvanometric instrument used is a two-stage direct current amplifying system, connected with an Esterline-Angus Ink Recording Milliammeter. The electric circuit was developed by Fordham University and was used extensively in experimental and criminological work. We also used it on psychotic patients. In all this work I had the collaboration of Drs. Kubis and Rouke of the Department of Psychology, Fordham University. The patients examined were all from the

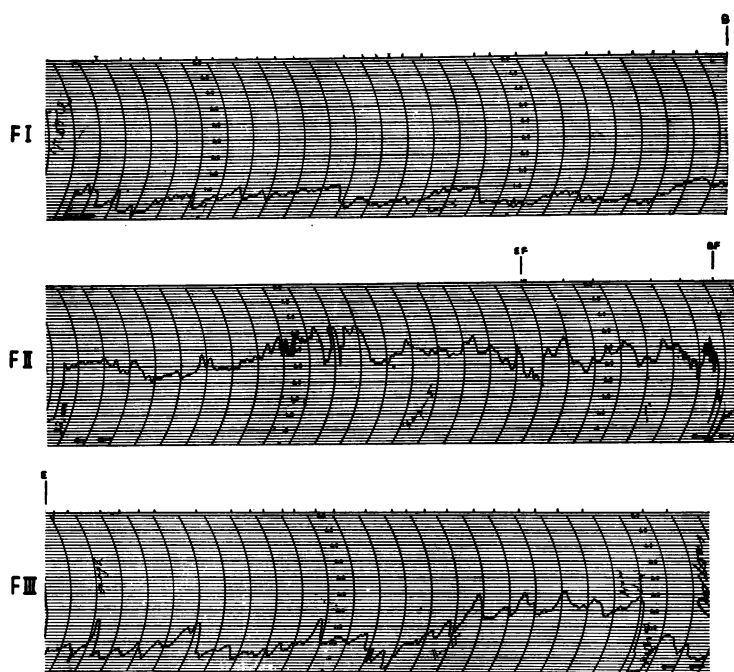


Figure 2

This is the record of a patient with an active traumatic neurosis. There is a sustained emotional tension. No RP. Record discontinued after 4½ minutes.

Merchant Marine Rest Center, Gladstone, N. J., suffering from acute or subacute states of "war nerves." No chronic cases were tested. Besides the patients suffering from war neuroses we used as controls about the same number of patients who had no war neuroses; furthermore, nurses, Red Cross ambulance drivers, and stenographers.

The experiments were carried out in the following manner. Electrodes fitting the palm of each hand were fastened on the patient and connected with the instrument. During the whole examination a running psychogalvanic record was kept. After applying the electrodes a number of questions were asked, which were generally insignificant and did not directly allude to a traumatic war experience. The patient was asked to tell his name, age, and how he felt. During this questioning the initial tension level was ascertained, which is naturally different in various individuals. Some patients are apprehensive, not knowing the procedure, and show an increased emotional tension. It was found

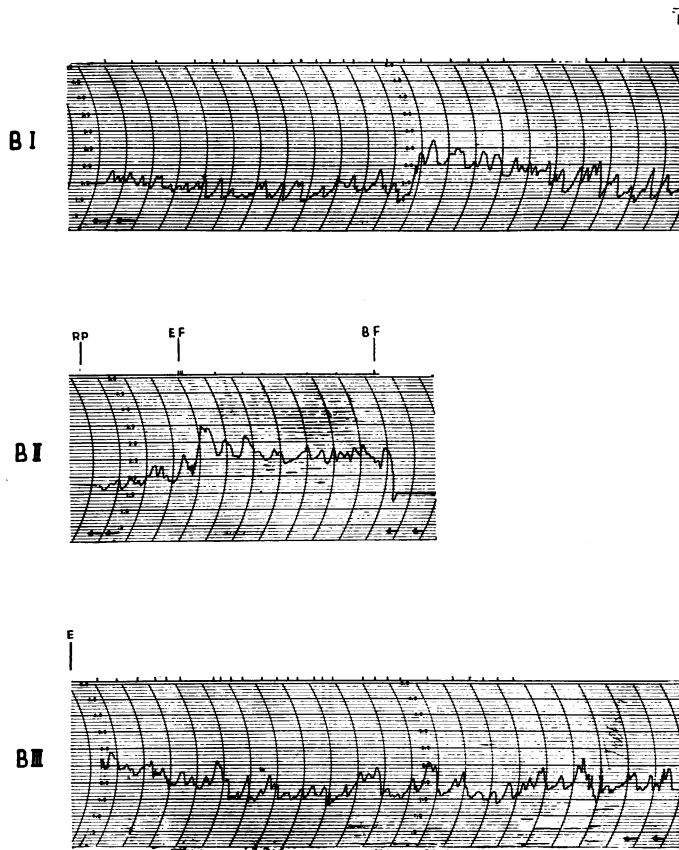


Figure 3

Recovered patient. Distance between EF. and RP. represents a time interval of 1 minute.

that the persons who had no traumatic war experience responded according to their nervous constitution. Some of them showed an immediate apprehension and an increased deflection in the galvanometer. Others remained calm and the deflection of the galvanometer was not marked. When the original tension level was ascertained, a sound film was shown for a few minutes. This film shows a tanker moving peacefully, and depicts every-day activities on board. Then suddenly the ship is torpedoed and sinking. People are hurt, some are jumping overboard to try to save themselves. The picture is quite realistic and is accompanied with impressive sound effects. Several minutes after showing this picture the same initially asked questions are repeated. As you

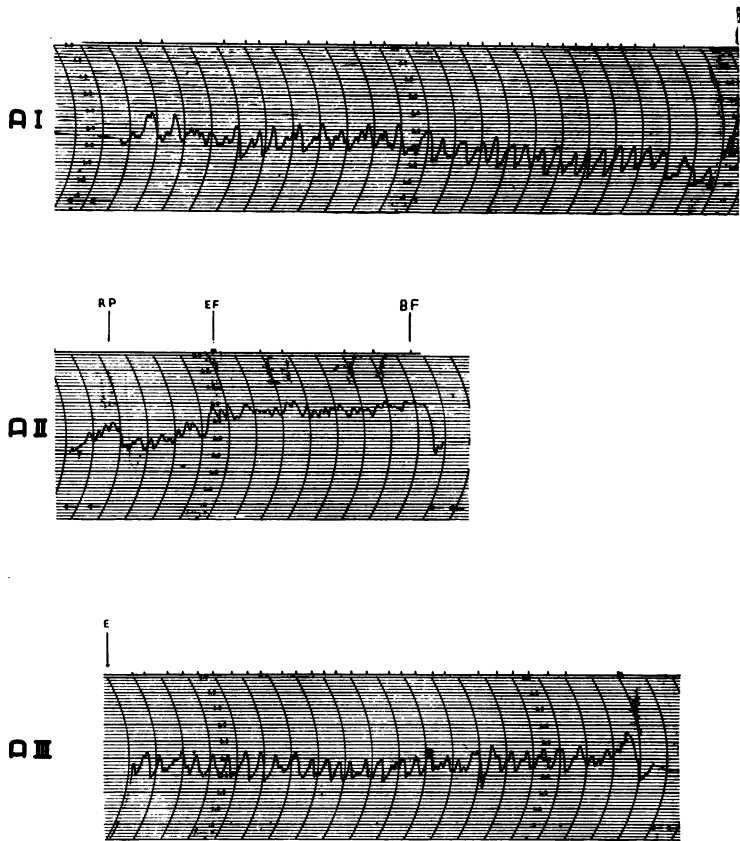


Figure 4

Recovered patient. Distance between EF. and RP represents a time interval of 1 minute.

readily see in the graphs, most persons show an increased emotional tension when the torpedoing occurs. The deflection of the curve upward from the original line is clearly visible. The height of this deflection, however, is not so important. Generally speaking, war neuroses cases show a more marked jumping upward, but occasionally the same condition prevails in impressionable non-war cases. A very significant finding, however, is the duration of the tension state. In an emotionally well-balanced individual, after being shown the picture, the tension quickly dies down. In about $1\frac{1}{2}$ minutes the galvanometer deflection moves downward and reaches the original starting level. In some borderline cases the reaction doesn't return to norm before two minutes.

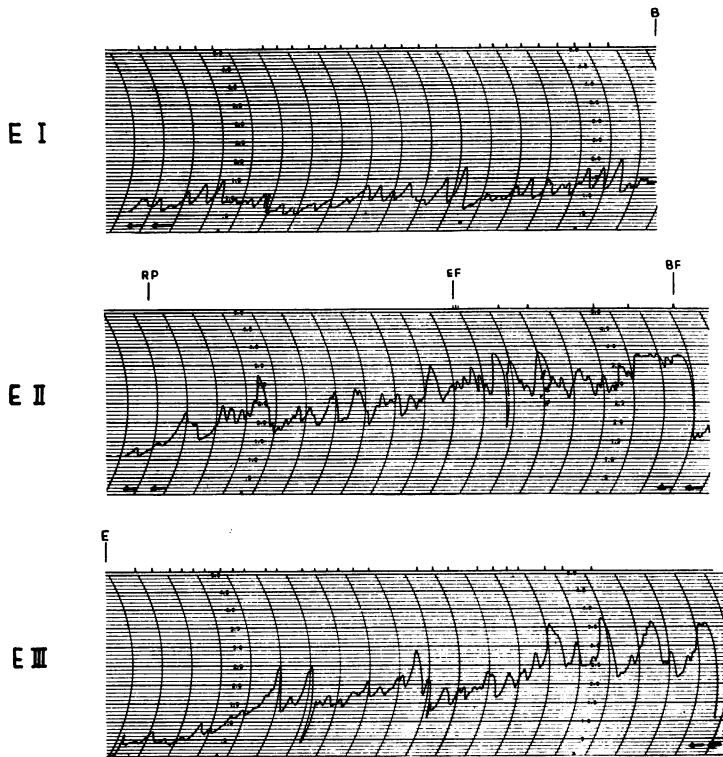


Figure 5

Improved patient. Residuals of neurosis present. Distance between EF. and RP. represents a time interval of $2\frac{1}{2}$ minutes (normal $1\frac{1}{2}$ minutes).

If after two minutes the needle of the galvanometer still does not drop down, a protracted tension state is present. In some instances we had to wait several minutes until the reaction died down. In several severe cases of war neuroses the needle stayed up so long that by the conclusion of the experiment, still no relaxation of the tension occurred. In our experience non-war cases, including neurotic individuals, always came down in about two minutes. Apparently the moving picture does not involve them emotionally too much. Only some tension occurs, but it rapidly diminishes and the original emotional balance is restored. It is quite different, however, with cases suffering from war neuroses. In these cases a protracted tension state is invariably demonstrable. In most instances the galvanometric record runs parallel with the clinical observation. The person is obviously tense, jittery, at times shows

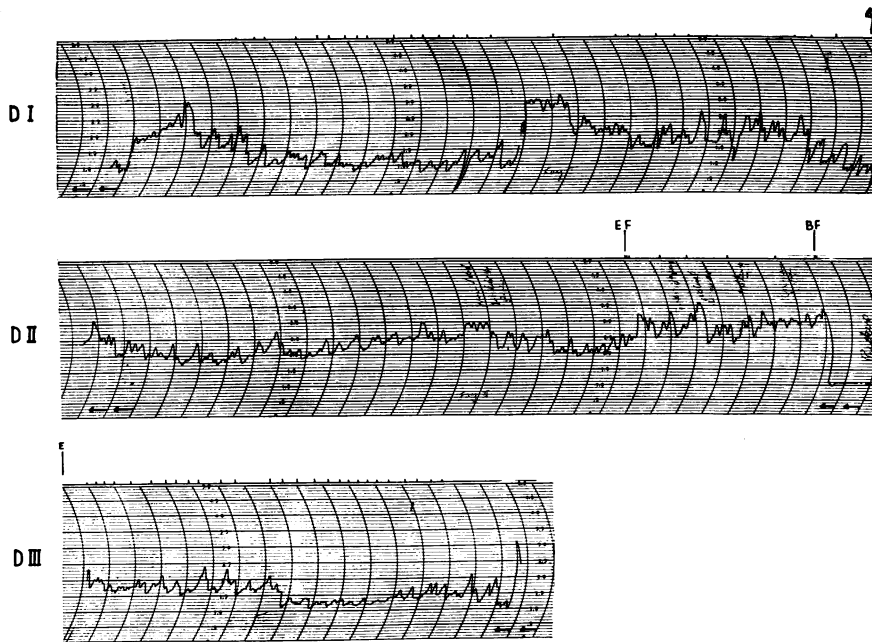


Figure 6

Unimproved patient. Tension sustained after EF. No RP.

tremor, and readily admits a subjective feeling of tension or anxiety. In a number of instances, however, the psychogalvanometric recording is superior to the clinical observation or subjective statement of the patient. We had cases of war neuroses where the patient appeared to be clinically well and was ready to resume his duties. The psychogalvanometer, however, still indicated the presence of apprehension. In some instances a relapse occurred in these patients.

It was noticed by a number of investigators that patients suffering from gross hysterical manifestations as, for instance, hysterical paralysis or deafness, did not display much anxiety; on the contrary, they appeared to be rather happy and content. The emotional tension is clearly demonstrable in these patients with the psychogalvanometer.

In some patients who suffered from gastric ulcer which developed as a result of war experience, no overt anxiety is demonstrable. They disclaimed that they were anxious or apprehensive. Our psychogalvanometric records, however, clearly show a marked apprehension in these patients. We think, therefore, that the psychogalvanometric recording

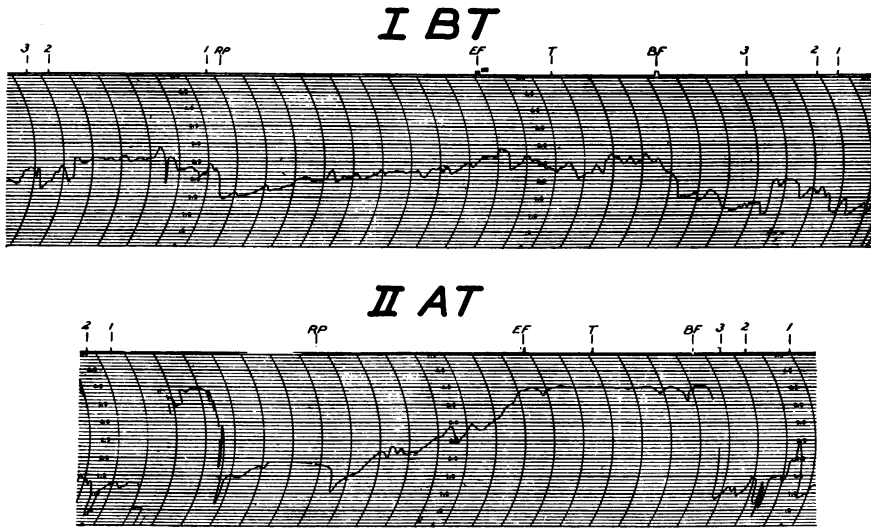


Figure 7

- I. BT. Before treatment session with sodium amytal and psychotherapy. Distance between EF. and RP. represents a time interval of 2 minutes and 20 seconds.
- II. AT. After treatment session. Distance between EF. and RP. represents a time interval of one minute and 50 seconds.

gives quite a good objective evidence as to whether or not apprehension is present.

Seemingly in persons who developed a traumatic war neurosis the showing of a picture which depicts situations to which they were exposed mobilizes a great deal of associative material, which produces apprehension, anxiety and its vegetative concomitants. In individuals who did not have such an experience the picture is meaningless and does not produce an emotional upheaval. We believed in the beginning that the persons who were exposed to this picture would not respond in the same way when they saw it again the second or third time. Apparently no emotional adaptation occurred. The persons who remained jittery and apprehensive responded over and over again in a similar way as when they first saw the picture. Only when they felt relaxed and the clinical symptoms of the neurosis disappeared, did they show a normal form of response. It is naturally possible that if a person is exposed to the same stimulus very often, he will not respond to it because a conditioning takes place. In such an instance, not the identical

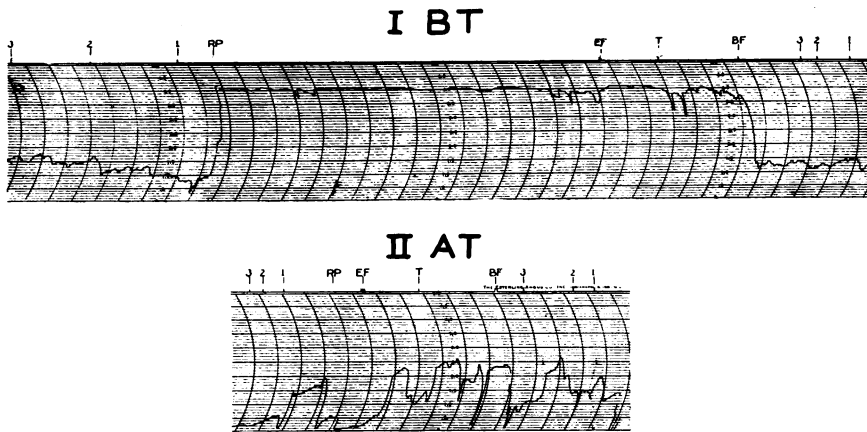


Figure 8

- I. BT. Before treatment session with sodium amytal and psychotherapy. Distance between EF. and RP. represents a time interval of 4 minutes.
 II. AT. After treatment session. Distance between EF. and RP. represents a time interval of 30 seconds.

but similar pictures should be shown.

In quite a large number of patients suffering from traumatic war neuroses we took a record when they were admitted to the Rest Home. Later on we took it again when the treatment progressed after a while, and finally, a retake was made before discharge. Those patients who showed a good recovery clinically, invariably demonstrated a psychogalvanic response which returned to normal, or, at least, the record became borderline. We believe, therefore, that the recovery of the patient could be measured with this test, and the state of his emotional relaxation objectively recorded. How far this test can be used for a long-run prognostication in the traumatic war neuroses we do not know. We had two patients who showed a good clinical recovery and a normal psychogalvanic record, who some time after discharge relapsed. It is possible that when the patient is again exposed to some experience which reactivates the fear mechanism suddenly, the full picture of the neurosis can be reactivated in a short time. This so-called associative reactivation is an interesting phenomenon, and was discussed by many authors. In the majority of our patients, however, we had the impression that after they recovered they remained well. We naturally do not know whether or not they were ever exposed to a similar war experience.

The psychogalvanic test can be also utilized for therapeutic investigations. We used it to demonstrate the influence of narcosuggestion and narcoanalysis. It naturally can be used to test the efficacy of any other method of treatment. One of our graphs shows that under the influence of sodium amytal and suggestion, the patient who for a short time before showed a marked tension became nearly normal in his psychogalvanic reaction while under treatment. Correspondingly, he also showed a clinical improvement. We believe that this method objectively demonstrates how the drug or psychotherapeutic procedures relax the anxiety, and naturally also eliminate the vegetative nervous system reverberations of the emotional tension. We believe it also shows clearly how important the sedation is in the war neuroses. The amount of sodium amytal in these cases naturally is only a sedative dose, or one which produces relaxation and a twilight state, but not a dose which produces sleep. If a high dose of sodium amytal, which leads to sleep, is given, it is natural that no psychogalvanic response will occur. In some patients some prognostication is possible as to the length of duration of treatment. If following a session with sodium amytal and psychotherapy a patient remains free from tension for several hours, the prognosis for quick recovery is rather good. In the more intractable cases of war neuroses, even though a relaxation occurred during the treatment, the old apprehension is back after a short time.

The psychogalvanometric assay of the patient can be given quickly. The test can be completed in a few minutes, which we believe is of an advantage. From a theoretical point of view we are impressed by the fact that a basic uniform deviation seems to be present in all the war cases, regardless of their clinical symptomatology, which would indicate that the apprehension and tension and its vegetative manifestations are the common denominators in all the war neuroses, and the other rather complicated clinical pictures are only secondary elaborations on this basic psychosomatic alteration.